

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration and allowance of this application in view of the amendments above and the following comments. Claims 1-17 were pending. Claims 3 and 4 are withdrawn. By this Amendment, claims 1, 2, 6, and 8 have been amended, claim 13 cancelled without prejudice or disclaimer, and new claim 18 has been added. No new matter has been added. Accordingly, claims 1-2, 5-12, and 14-18 are pending.

Election/Restriction

Applicants respectfully insist on claim 3 being included in the chosen Group I since its subject comprises group L being selected from the group of a phosphorous containing molecule/backbone.

Response to Prior Amendment

Brackets have been used to indicate that the "=" has been deleted in claim 1. Furthermore, it was unintentional to show markings to the phrase "p is at least 3 and not more than 17" in claim 1 in the response filed 12/06/04 since this phrase was already added by the response filed 8/12/04.

**Rejection of claims 1-2 and 5-17 under 35 U.S.C. § 112, first paragraph,
written description**

Applicants have cancelled the alleged new matter. For example, claims 1 and 2 have been amended to add the charge to the terminal oxygen atom and inserted the dashed bond between P---R₄. Claims 5-17 either directly or indirectly depend on claim 1. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

**Rejection of claims 8 and 12-16 under 35 U.S.C. § 112, first paragraph,
enablement**

Claim 8 has been amended so that it reads as a method of inhibiting telomerase activity in tumor cells in a mammal, wherein the oligonucleotides have a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 to SEQ ID NO: 28.

In addition, a declaration from an inventor of the claimed invention is attached as **Exhibit 1**. The declaration states in part, that based on the teachings of the specification and what was known in the art at the time of filing, one of ordinary skill in the art would have been able to use the claimed oligonucleotide compounds in a method for inhibiting telomerase activity in tumor cells in a mammal without undue experimentation. In support of this, attached as **Exhibit 2** is a summary of an experiment conducted *in vivo* which shows using the chimeric oligonucleotides according to the present invention to inhibit telomerase activity in human cancer cells transplanted into a nude mouse.

in vitro/ in vivo correlation

M.P.E.P. § 2164.03 states in part, that in some cases, *in vitro* data can support *in vivo* applications. See In re Brana, 51 F.3d, 1560, 1566. In this case, applicants have shown that based on the teachings of the specification and what was known at the time of filing inhibiting telomerase activity in tumor cells in a mammal is possible. Applicants have not only shown this through *in vitro* experiments but *in vivo* experiments as well. The *in vivo* experiment submitted as Exhibit 2 shows inhibiting telomerase activity in tumor cells in a mammal, which is what is claimed (see claim 8). Thus, applicants have shown a correlation between the "working examples" and the claimed invention. Applicants, therefore, respectfully request that the Examiner reconsider and withdraw this rejection.

Rejection of claims 1-2 and claims 5, 9-11 and 17 under 35 U.S.C. §102(b) as being anticipated by Uhlmann

In order to show anticipation, the reference must teach or suggest every element. In the claimed invention (see claim 1), the 3' end of R is formed as a primary amide and the number n in the claimed invention (see claim 1) is between 10 and 20. Whereas, in Uhlmann, the molecule is terminated by a secondary amide bound to a hexanol residue and the number n in Uhlmann only discloses n=3 or in Figure 3 a maximum of n=7 nucleotides is mentioned. Thus, Uhlmann et al does not anticipate the claimed invention because Uhlmann et al fails to teach or suggest every element of the claimed invention. Applicants, therefore, respectfully request that the Examiner reconsider and withdraw this rejection.

Objection to the Specification

Applicants have amended the specification to correct the misspelled text. Applicants, therefore, respectfully request that the Examiner reconsider and withdraw this objection.

Allowance of new claim 18

In the Office Action, the Examiner stated that the specification is enabled for using chimeric oligonucleotides according to the present invention to inhibit telomerase activity *in vitro*. New claim 18 is directed towards a method using chimeric oligonucleotides according to the present invention to inhibit telomerase activity *in vitro*.

CONCLUSION

Based on the foregoing remarks it is believed that the claim is in condition for allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this response is required, Applicants request that this be considered a petition therefore. Please charge the required fee to Deposit Account No. 14-1263.

ADDITIONAL FEES

Please charge any further insufficiency of fees, or credit any excess to Deposit Account No. 14-1263.

Respectfully submitted,

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